In accordance with 37 CFR §1.121 a marked up version of the above-amended paragraph(s) illustrating the changes introduced by the forgoing amendment(s) are provided in Appendix B.

In the Claims:

Please amend the claims by substituting the following claims for the corresponding previously pending claims of the same number(s):

1. A fluorogenic composition for the detection of the activity of a protease, said composition having the formula:

$$F_1\text{-}aa^1{}_j\text{-}(aa^2\text{-}aa^3)_k\text{-}aa^4{}_l\text{-}aa^5\text{-}X_m\text{-}P\text{-}Y_n\text{-}aa^6\text{-}aa^7{}_o\text{-}(aa^8\text{-}aa^9)_p\text{-}aa^{10}{}_q\text{-}F_2$$

$$(S^1)_i \qquad\qquad (S^2)_r$$

wherein, P is a peptide selected from the group consisting of DEVDGIN (SEQ ID NO:196), (d-O)DEVDGIN (SEQ ID NO:197), DEVDGID (SEQ ID NO:198), LVEIDNG (SEQ ID NO:199), GIETESGV (SEQ ID NO:200), TGRT (SEQ ID NO:201), VMTGRT (SEQ ID NO:202), SEVKLDAEF (SEQ ID NO:203), S(d-E)VK(d-L)DAE(d-F) (SEQ ID NO:204), EDVVCCS (SEQ ID NO:205), EEVEGIN (SEQ ID NO:206), D(d-F)VDGIN (SEQ ID NO:207), (d-D)EV(d-D)GIN (SEQ ID NO:208), LVEIENG (SEQ ID NO:209), GIETDSG (SEQ ID NO:210), GIETESG (SEQ ID NO:211), LEHDGIN (SEQ ID NO:212), LETDGIN (SEQ ID NO:213), WEHDGIN (SEQ ID NO:214), YVHDG (SEQ ID NO:215), YVHDGIN (SEQ ID NO:216), YVHDA (SEQ ID NO:217), TGRTG (SEQ ID NO:218), S(d-E)VK(d-L)DAE(d-F) (SEQ ID NO:219), IEPDS (SEQ ID NO:220), PLGIAGI (SEQ ID NO:221), SQNYPIVQ (SEQ ID NO:222);

F^1 and F^2 are fluorophores and F^1 is attached to the amino terminal amino acid and F^2 is attached to the carboxyl terminal amino acid;

S^1 and S^2, when present, are peptide spacers ranging in length from 1 to about 50 amino acids and S^1, when present, is attached to the amino terminal amino acid and S^2, when present, is attached to the carboxyl terminal amino acid;

i, j, k, l, m, n, o, p, q, and r are independently 0 or 1;

aa^1 and aa^{10} are independently selected from the group consisting of lysine, ornithine and cysteine;

aa^2, aa^3, aa^8, and aa^9 are independently selected from the group consisting of an amino acid or a dipeptide consisting of Asp, Glu, Lys, Ornithine, Arg, Citulline, homocitrulline, Ser, homoserine, Thr, and Tyr;

aa^5, aa^4, aa^6, and aa^7 are independently selected from the group consisting of proline, 3,4-dehydroproline, hydroxyproline, alpha aminoisobutyric acid and N-methyl alanine;

X is selected from the group consisting of Gly, βAla, γAbu ,Gly-Gly, Ahx, C7, βAla-Gly, βAla-βAla, γAbu-Gly, βAla-γAbu, Gly-Gly-Gly, γAbu-γAbu, Ahx-Gly, βAla-Gly-Gly, Ahx-βAla, βAla-βAla-Gly, Gly-Gly-Gly-Gly (SEQ ID NO:223), Ahx-γAbu, βAla-βAla-βAla, γAbu-βAla-Gly, γAbu-γAbu-Gly, Ahx-Ahx, γAbu-γAbu-βAla, and Ahx-Ahx-Gly;

Y is selected from the group consisting of Gly, βAla, γAbu, Gly-Gly, Ahx, C7, Gly-βAla, βAla-βAla, Gly-γAbu, γAbu-βAla, Gly-Gly-Gly, γAbu-γAbu, Gly-Ahx, Gly-Gly-βAla, βAla-Ahx, Gly-βAla-βAla, Gly-Gly-Gly-Gly, γAbu-Ahx, βAla-βAla-βAla, Gly-βAla-γAbu, Gly-γAbu-γAbu, Ahx-Ahx, βAla-γAbu-γAbu, and Gly-Ahx-Ahx;

when i is 1, S^1 is joined to aa^1 by a peptide bond through a terminal alpha amino group of aa^1; and when r is 1, S^2 is joined to aa^{10} by a peptide bond through a terminal alpha carboxyl group of aa^{10}.

4. The composition of claim 1, having an amino acid sequence selected from the group consisting of Fa-KDPJGDEVDGINGJPKGY (SEQ ID NO:224), Fm-KDPJGDEVDGINGJPkamide (SEQ ID NO:225), Fm-KDPJG (d-O)DEVDGINGJPKGY (SEQ ID NO:226), Fm-KDPJGDEVDGINGPKGY (SEQ ID NO:227), Fm-KDPGDEVDGINGJPKGY (SEQ ID NO:228), Fm-KDPJGDEVDGIDGJPkamide (SEQ ID NO:229), Fm-KDPJGLVEIDNGJPKGY (SEQ ID NO:230), Fm-KDPJGIETESGVGJPKGY (SEQ ID NO:231), Fm-KDPJTGRTGPKGY (SEQ ID NO:232), Fm-DPTGRTGPKGY (SEQ ID NO:233), Fm-KDPVMTGRTGJPKGY (SEQ ID NO:234), Fm-KDPTGRTGJPKGY (SEQ

ID NO:235), Fm-KDPJGTGRTGJPKGY (SEQ ID NO:236), Fm-KDPJGTGRTGPKGY (SEQ ID NO:237), Fm-KDPGTGRTGPKGY (SEQ ID NO:238), Fm-KDPJGSEVKLDAEFGJPKGY (SEQ ID NO:239), Fm-KDPJGS (d-E])VK (d-L])DAE (d-F]) GC5PKDDY (SEQ ID NO:240), Fa-KDPJGEDVVCCSGJPKGY (SEQ ID NO:241), KDPJGEEVEGINGJPKGY (SEQ ID NO:242), KDPJGD (d-F])VDGINGJPKGY (SEQ ID NO:243), KDPJG (d-D])EV (d-D])GINGJPKGY (SEQ ID NO:244), KDPJGLVEIENGJPKGY (SEQ ID NO:234), KDPJGIETDSGJPKGY (SEQ ID NO:246), KDPJGIETESGJPKGY (SEQ ID NO:247), KDPJGLEHDGINGJPKGY (SEQ ID NO:248), KDPJGLETDGINGJPKGY (SEQ ID NO:249), KDPJGWEHDGINGJPKGY (SEQ ID NO:250), KDPJGYVHDGJPKGY (SEQ ID NO:251), KDPJGYVHDGINGJPKGY (SEQ ID NO:252), KDPJGYVHDAPKGY (SEQ ID NO:253), KDPJTGRTGJPKGY (SEQ ID NO:254), KDPC3TGRTGPKGY (SEQ ID NO:255), KDPC7TGRTGPKGY (SEQ ID NO:256), KDPC5GS(d-E])VK(d-L])DAE(d-F])GJPKGY (SEQ ID NO:257), KDPJGIEPDSGJPKGY (SEQ ID NO:258), KDPJGPLGIAGIGJPKGY (SEQ ID NO:259), and KDPJGSQNYPIVQGJPKGY (SEQ ID NO:260).

These amendments are made without prejudice and are not to be construed as abandonment of the previously claimed subject matter or agreement with the Examiner's position. In accordance with the requirements of 37 C.F.R. § 1.121, a marked up version showing the changes to the claims, is attached herewith as Appendix A. For the Examiner's convenience, a complete claim set of the currently pending claims is also submitted herewith as Appendix B.

REMARKS

This amendment is provided in Response to the Notice to Comply With Requirements for Patent Applications Containing Nucleotide Sequence And/Or Amino Acid Sequence Disclosures. Applicant(s) request entry of this amendment in adherence with 37 C.F.R. §§1.821 to 1.825. This amendment is accompanied by a floppy disk containing the sequences (SEQ ID NOs: 1-260) in computer readable form, and a paper copy of the sequence information that has been printed from the floppy disk.